

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:)	
Archer Daniels Midland Company)	Notice of Violation
Peoria, Illinois)	EPA-5-00-IL-10
PROCEEDINGS PURSUANT TO)	
SECTION 113(a)(1) and (3) OF)	
THE CLEAN AIR ACT, AS AMENDED,)	
42 U.S.C. §7413(a)(1) and (3))	

STATUTORY AUTHORITY

This Notice of Violation (NOV) is issued pursuant to Section 113(a)(1) and (3) of the Clean Air Act ("Act"), 42 U.S.C. §7413(a)(1) and (3), respectively. You are hereby notified that the Administrator of the United States Environmental Protection Agency ("U.S. EPA"), by authority duly delegated to the undersigned, finds Archer Daniels Midland Company ("ADM") to be in violation of Subtitle I, Part C of the Act, the Prevention of Significant Deterioration ("PSD") of Air Quality Regulations set forth at 40 C.F.R. §52.21, the Illinois State Implementation Plan ("SIP"), state opacity limits, and construction permit conditions.

REGULATORY BACKGROUND

1. On June 19, 1978, the Administrator of U.S. EPA promulgated regulations to prevent the significant deterioration of air quality pursuant to Subtitle I, Part C of the Act. These regulations are codified at 40 C.F.R. §52.21 (the "PSD regulations").
2. On April 8, 1980, delegation of PSD authority to review and process permit applications was granted to the Illinois Environmental Protection Agency ("IEPA").
3. On August 7, 1980, the provisions of 40 C.F.R. §52.21(b) through (w) were incorporated into and made part of the Illinois SIP. 45 Fed. Reg. 52741.
4. 40 C.F.R. §52.21(i) prohibits construction of a major stationary source or major modification to a major stationary source in an area which has attained the National Ambient Air Quality Standards ("NAAQS") without first applying for and receiving a permit to construct issued under the PSD regulations. 40 C.F.R. §52.21(b)(1)(i)(b) defines major stationary source as "notwithstanding the stationary source size specified in paragraph (b)(1)(i) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under the act."

5. The PSD regulations define a "major modification" as a physical or operational change at an existing major stationary source that would result in a significant net emissions increase of a pollutant subject to regulation under the Act. 40 C.F.R. § 52.21(b)(2)(I). The PSD regulations define "significant net emissions increase" for particulate matter as a rate of emissions which would equal or exceed 25 tons per year of particulate matter. 40 C.F.R. § 52.21(b)(23)(i).
6. Any owner or operator of a source subject to PSD regulations who commences construction without applying for and receiving a permit to construct under the PSD regulations is subject to enforcement action. 40 C.F.R. §52.21(r).
7. The Illinois SIP was promulgated on May 31, 1972. Federal Register, Vol. 37, No. 105. On May 31, 1972, U.S. EPA approved 35 Illinois Administrative Code (IAC) §201.142 and 135 IAC §201.143 as part of the federally enforceable SIP for the State of Illinois. 37 Fed. Reg. 10862.
8. 35 IAC §201.142, entitled "Construction Permits for New Sources" applies to any new emission source or new air pollution control equipment, for which construction or modification commenced on or after April 14, 1972. A person shall obtain a construction permit from the IEPA before causing and allowing the construction of the new sources.
9. On December 29, 1992, U.S. EPA approved Title 35 of Illinois Administrative Code (35 IAC) §212.122 and §212.123 as part of the federally enforceable SIP for Illinois. 57 Fed. Reg. 61834. The effective date of the approval was March 1, 1993.
10. 35 IAC §212.122, entitled "Limitations for Certain New Sources," applies to each new emission source which has an actual heat input greater than 250 mmBtu/hr. A "new emission source" is defined by 35 IAC §201.102 to mean any emission source for which construction began after April 14, 1972. 35 IAC §212.123, entitled "Limitations for All Other Sources," applies to any emission source that is not subject to 35 IAC §212.122.
11. 35 IAC §212.123 provides an opacity limitation of 30 percent for smoke or other particulate matter emissions into the atmosphere from any emission source. The rule includes an exception which allows for the emission of smoke with an opacity greater than 30 percent, but less than 60 percent, for a period totaling 8 minutes in a 60 minute period. This exception is limited to one emission source per facility within a 1,000 foot radius, and only applies three times in a 24 hour period.
12. 40 C.F.R. §52.23 provides, inter alia, that failure to comply with any provisions of 40 C.F.R. Part 52, or with any approved regulatory

provision of a SIP or with any permit condition, or with any permit limitation or condition contained within an operating permit issued under an EPA-approved program that is incorporated into the SIP, subjects the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under Section 113 of the Act.

SPECIFIC FINDINGS AND DETERMINATION

13. ADM owns and operates an ethanol manufacturing facility in Peoria, Illinois ("the ADM Peoria plant").
14. The ADM Peoria plant is located in Peoria County, Illinois, an area which has been designated as an attainment area for the particulate matter NAAQS. 40 C.F.R. § 81.314.
15. As of May 5, 1992, the ADM Peoria plant consisted of fermenters, four (4) feed dryers, one fluid bed dryer, three (3) steam tube dryers and various other equipment used in the production of ethanol and feed. At that time the ADM Peoria facility constituted a "major emitting facility" as defined at Section 169 of the Act because it had the potential to emit VOCs in quantities greater than 250 tons per year.
16. On May 5, 1992, pursuant to an application by ADM, IEPA issued construction permit 92020007 to ADM for construction of a fifth feed dryer, a third grits column, and connection of the 190 proof ethanol tank to an existing scrubber.
17. On July 21, 1993, pursuant to an application by ADM, IEPA issued revised permit 89110044 to ADM for the operation of the ethanol plant. This permit included a particulate matter emission limitation for the five (5) feed dryers of 11.3 lbs./hour and 49.5 tons/year.
18. On June 30, 1994, pursuant to an application by ADM, IEPA issued revised construction permit 92020007 for the fifth feed dryer (referenced in paragraph 15, above), a third grits column, and connection of the 190 proof ethanol tank to an existing scrubber, and to increase plant production. This permit limited ADM to handling no more than 250,000 bushels of grain per day.
19. In 1994, ADM applied for a permit to add three new fermenters and to increase the overall capacity of the ethanol plant to 270,000 bushels of grain per day from the previously permitted 250,000 bushels per day.
20. On May 5, 1995, IEPA issued to ADM construction permit 94090059 for three new fermenters and process improvements with increased plant production. The permit allowed the ADM Peoria plant to increase its maximum grind rate

from 250,000 bushels per day to 270,000 bushels per day. The permit also contained a series of special conditions including limitations on feed drying operations at the plant. Particulate matter emissions at the feed dryers were limited to 13.8 lbs/hr and 61.74 tons/yr.

21. Special condition 12a. of permit 94090059 states that "As a consequence of the above conditions, this permit is issued based on the modification of the plant not constituting a major modification subject to the federal rules for Prevention of Significant Deterioration of Air Quality (PSD).
22. On June 2, 1999, ADM conducted an emissions test of its feed dryers exhausting through the "super stack". The results of this test indicated that the addition of the fifth feed dryer, the construction of the three fermenters and associated increased plant production constituted a major modification as defined at 40 C.F.R. §52.21(b)(2).
23. The June 2, 1999, performance test was intended to fulfill the requirements of permit 94090059, which required measurement of particulate matter emissions from the feed drying operation upon completion of the facility expansion. The performance test was also requested by U.S. EPA under Section 114 of the Act, in a letter dated February 24, 1999.
24. The performance test was conducted while the facility was operating at a grind rate approximately equivalent to 270,000 bushels per day, the maximum production level allowed by the plant operating permit.
25. The performance test demonstrated that particulate matter emissions from the feed drying operations were 20.2 lbs/hr. At this emission rate the feed drying operations at the ADM Peoria facility have the potential to emit 88.48 tons/year at permitted production levels. Permit No. 94090059 limits the particulate matter emissions to the following: 24.84 tons/yr from product loadout, 3.57 tons/yr from fluid bed germ drying, 0.184 from steam tube germ drying, 0.100 from feed cooling, and 0.44 tons/yr from other grain processing operations not addressed specifically. As a result, in total, potential emissions of particulate matter from the entire ADM facility following the installation of the fifth feed dryer, the three new fermenters, and the associated increased plant production, were 117.64 tons per year.
26. In 1992, prior to the addition of the fifth feed dryer, the three new fermenters, and the associated increased plant production, ADM's actual emissions of particulate matter from their entire facility were 63.6 tons per year.
27. Subtracting past actual emissions in 1992 from current potential emissions, shows a net emissions increase of 54.04 tons per year.

28. Based on the above, the addition of the fifth feed dryer, the three fermenters, and the associated increased plant production is a major modification to an existing major source. The projects increase the potential to emit particulate matter (PM) in excess of the "significant" threshold of 25 tons per year, as defined at 40 C.F.R. §52.21(b)(23). Therefore, the addition of the fifth feed dryer, the three fermenters, and the associated increased plant production increase constituted a major modification to an existing PSD major source.
29. ADM's construction of the fifth feed dryer, the three new fermenters and associated increased plant production without a PSD permit to construct is a violation of Section 165 of the Clean Air Act, 42 U.S.C. §7475; 40 C.F.R. §52.21(i)(1); and the Illinois SIP.
30. ADM's operation of the Peoria plant while emissions exceed the particulate matter emissions limits set forth for feed drying in Construction Permit 94090049 is a violation of the SIP.

31. On September 25, 1997, ADM's emissions at the super stack, which exhausts emissions from the feed drying operations, exceeded an average of 30 percent opacity during seven six-minute visible emission observation periods (168 consecutive readings), as summarized below:

Table 1

Visible Emission Violations for "Super Stack"

Date	Time	6-minute average opacity observed	Time in Violation
9/25/97	11:18 - 11:24	35.0 %	
	11:24 - 11:30	50.4 %	
	11:30 - 11:36	38.3 %	
	11:36 - 11:42	38.3 %	
	11:42 - 11:48	38.5 %	
	11:48 - 11:54	39.2 %	
	11:54 - 12:00	45.0 %	34 minutes ★

32. On April 7, 1999, ADM's emissions at the super stack, which exhausts emissions from the feed drying operations, exceeded an average of 30 percent opacity during ten six-minute visible emission observation periods (240 consecutive readings), as summarized below:

Table 2

Visible Emission Violations for "Super Stack"

Date	Time	6-minute average opacity observed	Time in Violation
4/7/99	12:38 - 12:44	36.7 %	
	12:44 - 12:50	37.7 %	
	12:50 - 12:56	37.9 %	
	12:56 - 1:02	47.3 %	
	1:02 - 1:08	40.4 %	
	1:24 - 1:30	40.2 %	
	1:30 - 1:36	39.8 %	
	1:36 - 1:42	41.5 %	
	1:42 - 1:48	40.8 %	
	1:48 - 1:54	40.6 %	44 minutes ★★

★ Eight minute exemption applied

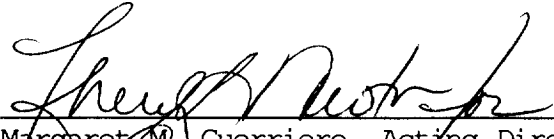
★★ Two eight minute exemptions applied

33. The opacity readings taken at the super stack showed a total of 42 minutes of exceedance out of 42 minutes of readings on September 25, 1997. The opacity readings taken at the super stack showed a total of 1 hour of exceedance out of 1 hour of readings on April 7, 1999. Visible emissions from ADM's super stack violated the opacity limitation found at 35 IAC §212.123.

NOTICE OF VIOLATION

The Administrator of U.S. EPA, by authority duly delegated to the undersigned, notifies the State of Illinois and ADM, that the facility described above is in violation of the Federally enforceable PSD regulations found at 40 C.F.R. §52.21, Illinois SIP, construction permit conditions, and 35 IAC §212.123, as set forth in this Notice of Violation.

Date

1/14/00
Margaret M. Guerriero, Acting Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, do hereby certify that a Notice of Violation, issued pursuant to the Clean Air Act, was sent by Certified Mail, Return Receipt Requested, to:

Mark Calmes
Director Corporate Environmental Engineering Services
Archer Daniels Midland company
Box 1470
Decatur, Illinois 62525


I also certify that copies of the Notice of Violation were sent by first class mail to:

David Kolaz, Manager
Compliance and Systems Management Section
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

and

Dick Jennings
Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
5415 North University
Peoria, Illinois 61614

on the 18th day of January 2000.


Betty Williams, Secretary
AECAS (IL/IN)

P 140 895 503
CERTIFIED MAIL RECEIPT NUMBER